Please amend the Claims as follows:

This listing of claims will replace all prior versions, and listing, of claims in the application:

<u>Listing of the Claims</u>:

1 through 19 (canceled)

20. (currently amended) A smart span in a communication network comprising: a first node;

a second node;

a span connecting the first node with the second node with a direct path;

a path type indicator, stored in one of the two nodes, having a value of either a

working type or a protecting type adapted to specify a type of the direct path;

electronic path-creating circuitry in one of the first and second nodes; and

when the path type indicator being the working type,

a protection virtual path connecting the first and second nodes through a third node,

a protection virtual path connecting the first and second nodes through a third node, created by the electronic path-creating circuitry, and

an automatic protection switch in one of the first and second nodes adapted to
automatically switch to the protection virtual path upon detecting a failure condition in the span

wherein the electronic path-creating circuitry includes

electronic circuitry adapted to support a routing-protocol; and

electronic circuitry adapted to support a signaling- protocol

The smart span of claim 19 wherein the protection virtual path comprises an additional smart span including:

an additional direct path connecting two adjacent nodes in the protection virtual path;

an additional path type indicator for the additional direct path adapted to change the value from the protecting type to the working type upon detecting a failure condition in the span connecting the first node with the second node; and

additional electronic path-creating circuitry in one of the two adjacent nodes adapted to create an additional protection virtual path connecting the two adjacent nodes through at least another node upon detecting a failure condition in the span connecting the first node with the second node, and

said routing protocol is responsible for discovery of neighbors and link status, reliable distribution of routing topology information and optimal route determination, and

said signaling protocol provides the capability of establishing, tearing down and modifying connections across network nodes.

- 21. (currently amended) The smart span of claim 19 20 wherein one of the first node and the second node includes
 - a designated transit list adapted to specify the protection virtual path.
 - 22. (canceled)
- 23. (currently amended) The smart span of claim 19 20 wherein the span connecting the first node with the second node further includes a protection line, the direct pair in the span being a working line.
 - 24. (original) The smart span of claim 23 wherein one of the first node and the second

node includes an automatic protection switch adapted to switch from the working line to the protection line upon detecting a failure condition on the working line.

- 25. (canceled)
- 26. (canceled)